



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/769,836	01/25/2001	Anit Lohtia	NORT0091US(13488RRUS02U)	5514

7590

07/21/2004

Dan C. Hu
TROP, PRUNER & HU, P.C.
8554 Katy Freeway, Ste. 100
Houston, TX 77024

EXAMINER

NGUYEN, TU X

ART UNIT	PAPER NUMBER
----------	--------------

2684

DATE MAILED: 07/21/2004

4

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/769,836

Applicant(s)

LOHTIA ET AL

Examiner

Tu X Nguyen

Art Unit

2684

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2,3,5-17,20-29,31 and 33-38 is/are pending in the application.
- 4a) Of the above claim(s) 1,4,18,19,30 and 32 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2,3,5-17,20-29,31 and 33-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's arguments filed 5/24/04 have been fully considered but they are not persuasive.

Applicants argue, amended claim 2 page 9, Forssell does not teach a procedure to release the connection after the predetermined delay period includes sending an indication that the end of data transmission has occurred, receiving and acknowledgment of the indication, and releasing the connection in response to the acknowledgement. However, Forssell et al. teach a procedure to release the connection after the predetermined delay period (see col.7 lines 55-62) includes sending an indication that the end of data transmission has occurred (see col.12 lines 61-64), receiving and acknowledgment of the indication (see col.6 lines 30-35), and releasing the connection in response to the acknowledgement (see col.6 lines 34-35).

Applicants argue the independent claims 8, 25 and 29 that the timer function is implemented in the network, not in the mobile station. However, Forssell disclose the timer function in the mobile station (see col.8 lines 45-50 and col.16 lines 36-40, "a passive period starts" and "maintain at least for a predetermined time" at a mobile station corresponding to "the timer function in the mobile station").

2. Applicant's arguments with respect to claims 34-35 have been considered but are moot in view of the new ground(s) of rejection.
3. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 2-3, 5-10, 12-17, 21-25, 28-29, 31 and 33-38, are rejected under 35 U.S.C. 102(e) as being anticipated by Forssell et al. (US Patent 6,671,511).

Regarding claims 2 and 21, Forssell et al. disclose a method of performing packet-based communication in a wireless network, comprising:

establishing a connection over a wireless link between a mobile station and a radio access network system (see col.2 lines 49-67);

transmitting data in the connection (see col.2 lines 49-67);

waiting a predetermined time delay period after end of data transmission (see col.7 lines 55-62); and

starting a procedure to release the connection after the predetermined delay period (see col.11 lines 39-55).

Wherein starting the procedure comprises sending an indication that the end of data transmission has occurred (see col.12 lines 61-64), the indication being sent after waiting the predetermined time delay period after end of data transmission (see col.7 lines 55-62);

Receiving an acknowledgement of the indication (see col.6 lines 30-35); and

Releasing the connection in response to the acknowledgement (see col.6 lines 34-35).

Regarding claim 25, Forssell et al. disclose everything as claim 1 above. More specifically, Forssell et al. disclose the instructions when executed for performing packet-based communication (see col.14 line 64 through col.15 line 15).

Regarding claims 28-29, Forssell et al. disclose everything as claim 1 and 25 above. More specifically, Forssell et al. disclose waiting the predetermined time period comprises starting a timer in the mobile station (see col.8 lines 45-52 and col.16 lines 36-40).

Regarding claim 34, Forssell et al. disclose means for establishing an uplink temporary block flow over a wireless link with a second system (see col.5 lines 65-66);

means for detecting an end of data transmission (see col.6 lines 1-12, in light of specification page 6, last paragraph, "CV field set to 0" corresponding to "end of data transmission");

means for waiting a predetermined time period before providing an indication of the end of data transmission (see col.8 lines 45-52 and col.16 lines 36-40) and

means for releasing the uplink temporary block flow after waiting the predetermined time period (see col.8 lines 45-52).

Regarding claim 35, Forssell et al. disclose everything as claim 25 and 34 above.

Regarding claims 3 and 22, Forssell et al. disclose an indication that the end of data transmission has occurred (see col.12 lines 55-67).

Regarding claim 23, Forssell et al. disclose receiving an acknowledgement of the indication; and releasing the connection (see col.11-12).

Regarding claims 5, 13, 17, 24, 31 and 33, Forssell et al. disclose releasing a temporary block flow in a GPRS (see col.3 lines 50-64) uplink temporary block flow, the uplink connection comprising the uplink temporary block flow (see col.8 lines 45-52 and col.16 lines 36-40).

Regarding claim 6, Forssell et al. disclose releasing the connection comprises releasing a logical connection (see col.3 lines 20-64 and col.5 lines 1-4).

Regarding claim 7, Forssell et al. disclose one of plural logical connection assigned on a physical channel (see col.3 lines 20-64).

Regarding claims 8 and 14, Forssell et al. disclose everything as claim 1 above. More specifically the waiting and starting acts are performed in the mobile station (see col.8 lines 45-52 and col.16 lines 36-40, the waiting and starting acts are performed either uplink or downlink).

Regarding claims 9, 12 and 15, Forssell et al. disclose the waiting and starting acts are performed in the radio access network system (see col.7 lines 55-62).

Regarding claim 10, Forssell et al. disclose detecting the end of data transmission (see col.6 lines 1-12, in light of specification page 6, last paragraph, "CV field set to 0" corresponding to "end of data transmission").

Regarding claim 16, Forssell et al. disclose a radio link control/medium access control layer comprising the control module (see fig.2).

Regarding claim 36, Forssell et al. disclose means for receiving an acknowledgement of the indication (see col.6 lines 32-35),

wherein the releasing means releases the uplink temporary block flow in response to the acknowledgment (see col.8 lines 45-52 and col.16 lines 36-40).

Receiver claim 37-38, Forssell et al. disclose releasing an uplink logical connection (see col.2 lines 50-51) in response to starting the procedure after the predetermined delay period (see col.8 lines 45-52 and col.16 lines 36-40)

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 11, 20 and 26-27, are rejected under 35 U.S.C. 103(a) as being unpatentable over Forssell et al. in view of Wallentin et al.

Art Unit: 2684

Regarding claims 11, 20 and 26-27, Forssell et al. fail to disclose detect end of data transmission when the send buffer does not have data.

Wallentin et al. disclose detect end of data transmission when the send buffer does not have data (see col.7 lines 5-12). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Forssell et al. with the above teaching of Wallentin et al. in order to determine whether to switch from a dedicated radio channel to a shared radio channel when there is the transmit queue is empty.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tu Nguyen whose telephone number is (703) 305-3427. The examiner can normally be reached on Monday through Friday from 8:30 a.m. to 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MAUNG NAY A, can be reached at (703) 308-7749.

Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center 2600 Customer Service Office at (703) 306-0377.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9314 (Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Tu
July 6, 2004


NAY MAUNG
SUPERVISORY PATENT EXAMINER